

Review of: "An Improved Hybrid Transfer Learning-Based Deep Learning Model for Alzheimer's Disease Detection Using CT and MRI Scans"

Muhammad Assam¹

¹ Zhejiang University

Potential competing interests: No potential competing interests to declare.

Is the introduction clear and informative in explaining the significance of the research problem, i.e., the early detection of Alzheimer's Disease using deep learning techniques?

Are the objectives and research questions of the study clearly defined in the introduction?

Is the background information on Alzheimer's Disease and deep learning provided adequately to understand the context of the research?

Does the paper provide sufficient detail about the methodology used, specifically the use of deep learning, transfer learning, and the choice of neural network models (ResNet50, VGG16, DenseNet121)?

Are the datasets used for training and testing clearly described, and is it clear how the data was collected and preprocessed?

Does the paper explain how the classification into various AD stages was performed, and are the criteria for these stages well-defined?

Is the evaluation of the models well-documented, including the metrics used for performance assessment?

Does the paper provide a comparison of the proposed methodology with existing approaches, highlighting the improvements achieved?

Are the results presented clearly with visual aids, such as graphs or tables, to support the findings?

Does the paper discuss potential limitations of the study, including issues related to the dataset, model selection, or generalizability of the results?

Are there any ethical considerations, such as patient privacy and data security, addressed in the research?

Does the conclusion effectively summarize the key findings and their implications for Alzheimer's Disease detection and management?

Are there any recommendations for future research or practical applications mentioned in the paper?

Is the writing style clear and concise, and are there any grammatical or typographical errors that need correction?

Overall, does the paper provide a compelling case for the use of deep learning and transfer learning in improving Alzheimer's Disease diagnosis and classification, and is the research sound and well-executed?